

ABSTRACT OF THE DISCLOSURE

5 A failure diagnosis apparatus for secondary air  
supplier according to the present invention determines  
a failure of a secondary air supplier based on pressure  
and pressure pulsation in a secondary air supply path.  
A failure diagnosis is made by determining the presence  
or absence of pressure pulsation in the secondary air  
supply path based on a determination threshold, and in  
the present invention the determination threshold is  
10 varied according to a pressure value in the secondary  
air supply path (a smoothed value or an average value  
of measured pressure). This permits the apparatus to  
make an accurate failure diagnosis, while eliminating  
pressure pulsations except for that due to exhaust  
15 pulsation (e.g., that due to noise of the pressure  
sensor and that caused by surging of an air pump).